



US 20010012310A1

(19) **United States**(12) **Patent Application Publication** (10) Pub. No.: **US 2001/0012310 A1****Igarashi**

(43) Pub. Date:

Aug. 9, 2001(54) **GAS LASER DEVICE****Publication Classification**(76) Inventor: **Tatushi Igarashi, Oyama-shi (JP)**(51) Int. Cl.⁷ **H01S 3/22; H01S 3/223**(52) U.S. Cl. **372/58**

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(57) **ABSTRACT**(21) Appl. No.: **09/778,897**(22) Filed: **Feb. 8, 2001**(30) **Foreign Application Priority Data**Feb. 8, 2000 (JP) **2000-030748**

There is provided an excimer laser device capable of producing a stable oscillation even at a high repetition rate of 4 kHz. This gas laser device is comprised of a laser chamber having laser gas filled therein; a pair of main discharge electrodes arranged in the laser chamber; a cross-flow fan for circulating the laser gas within the laser chamber at least between the main discharge electrodes; and a diameter of the cross-flow fan is 150 mm or less, its peripheral speed being 25.0 m/s or more.

